Appl. No. : 09/076,404 Filed : May 12, 1998

## AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph on page 63, beginning at line 3 with the following paragraph:

Using DOCK, ligands have been identified for certain protein targets. Recent efforts in this area have resulted in reports of the use of DOCK to identify and design small molecule ligands that exhibit binding specificity for nucleic acids such as RNA double helices. While RNA plays a significant role in many diseases such as AIDS, viral and bacterial infections, few studies have been made on small molecules capable of specific RNA binding. Compounds possessing specificity for the RNA double helix, based on the unique geometry of its deep major groove, were identified using the DOCK methodology (Chen et al., Biochemistry, 1997, 36, 11402; Kuntz et al., Acc. Chem. Res., 1994, 27, 117). Using a recent X-ray structure for r(UAAGGAGGUGAU (SEQID NO: 25)). r(AUCACCUCCUUA (SEQID NO: 26)) as the model structure for the A-form RNA duplex, DOCK identified several aminoglycosides as candidate ligands, characterized by shape complementarity to the RNA groove. Binding experiments then revealed that one of these aminoglycosides not only bound preferentially to RNA over B-form DNA but also that the ligand binds in the targeted RNA major groove. Recently, the application of DOCK to the problem of ligand recognition in DNA quadruplexes has also been reported (Chen et al., Proc. Natl. Acad. Sci., 1996, 93, 2635).